

REMARKS

Enclosed please find Figure 1 consisting of 1 (one) sheet marked in red to identify the changes thereto. A discussion describing the revisions and the support therefore in the originally filed disclosure is provided below. Also enclosed please find Figure 1 consisting of 1 (one) sheet of the formal drawing for the subject application. In accordance with 37 C.F.R. 1.84(c), identifying indicia are provided on the backside of the sheet.

Applicants respectfully request that, prior to examination, Figure 1 be amended as shown on the marked-up version of Figure 1 and that pages 1 and 2 of the sequence listing be substituted with pages 1 and 2 submitted herewith. Applicants respectfully submit that no new matter is being added by the amendment of this figure and substitute sequence listing.

Figure 1 was originally filed with 9 (nine) residues inadvertently deleted from each row on the right hand side of the figure as indicated in the marked-up version submitted herewith. New Figure 1 sets forth the complete sequence for each organism. Applicants respectfully submit that, with the exception of the *Drosophila* ("fly") sequence, all the sequences in Figure 1 are known in the prior art, as described with genome database citations on page 3, lines 11-14 of the specification. Thus, one of ordinary skill in the pertinent art would have been able to obtain the correct sequences. In addition, the inadvertently omitted residues from the *Drosophila* sequence are described in the originally filed sequence listing in Sequence I.D No.1. Thus, no new matter has been added by virtue of this amendment.

Applicants further request that pages 1 and 2 of the sequence listing be replaced with the substituted pages submitted herewith. The Sequence I.D. No.1 in the original sequence listing was filed with 1 residue (K) inadvertently omitted in the second line of the listing (EIKSLED in the original should read EIKKSLED). This portion of the sequence was given correctly in the second line of the *Drosophila* ("fly") sequence in Figure 1 as originally filed and was also correctly shown in Figure 6B as originally filed. In addition, Sequence I.D. No.2 in the original sequence listing shows the DNA sequence encoding the correct protein, enabling one of ordinary skill in the pertinent art to obtain the correct sequence. Therefore, Applicants respectfully submit that no new matter is being added by the amendment of this sequence listing.

Should the Examiner wish to discuss the above amendment, the undersigned attorney would appreciate the opportunity to do so.

Applicants believe that additional fees are not required for consideration of the within Preliminary Amendment. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. **04-1105**.

Respectfully submitted,

Date:

5/2/01

By:

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BOS2_167185.1

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Figure 1: multiple sequence alignment

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yeast      MSTLIPPPSKKQKKEAQLPREVAIIIPKDLPNVSIKFQALDTGDNVGGALRVPGAISEKQL
c.elegans  -----PQISVSEDENELG---GSGILVPVDISTNEL
fly        -----MQETDTEQEATPHTIQARLVYTGEEAGPPIDLPAGITTOQL
mouse      -----EEAAAGD-VQRLLVQFQDEGGQLLGSPFDVPVDITPDKL
human      -----GSPFDVPVDITPDRIL
frog       -----MKEDVGRLLIQFKNENGEGLGTPFDVPLDITPDKL
           * : : * * : : *

yeast      EELLNQLNGTSDDPVPTFSCITQGGKASDPVKITIDITDNLVSSLIKPGYNSTEDQITLL
c.elegans  QILCNQLLGSR---FCLNNEFSVSG-----AEIVDSIRKSLEEIDFET---LKLIV
fly        GLICNALLKNE---EATPYLFFVGE-----DEIKSLEDTLDLASVDT-ENVIDIV
mouse      XLVCNALL-AQEEPLPLAFYVHD-----AEIVSSLGKTLESQSV-ETEKIVDII
human      QLVCNALL-AQEDPCPLAFFVHD-----AEIVSSLGKTLESQAV-ETEKVLDIY
frog       QLVCNALL-QEEDPVPLAFFVQD-----LEIVTSLDKTLEKQSV-ETEKVIDII
           : * * : * : : * : :

yeast      YTPRAVFKVKPVTRSSSAIAGHGSTILCSAFAPHTSSRMVTGAGDNTARIWDCDTQTPMH
c.elegans  YQPQAVFRVRPVTRCSASIPGHGEPVISAQFSPDGRG-LASGSGDQTMRIWDIELELPLH
fly        YQPQAVFKVRPVTRCTSSMPGHAEAVVSLNFSPDGAH-LASGSGDTTVRLWDLNTEPHF
mouse      YQPQAVFRVRVAVTRCTSS-----
human      -QPQXLFRVRVAVTRCTS-----
frog       YQPQAVFKVRVAVTRCTSSLEGHTEAVISVAFSPTGKY-LASGSGDTTVRFWDLSTETPHF
           * : : * : : * : :

yeast      TLKGHYNWVLCVSWSPDGEVIATGSMNDTIRLWDPKSGQCLGDALRGHSKWITSLSWEPI
c.elegans  TCKSHKSWVLCIAWSPDATKIASACKNGEICIWNAKTGEQIGKTLKRHKQWIXXLAWQP-
fly        TCTGHKQWVLCVSWAPDGKRLASGCKAGSIIIWDPETGQQKGRPLSGHKKHINCLAWEPY
mouse      -----
human      -----
frog       TSKGHTHWVLSIAWSPDGKKLASGCKNSQIFIWDPSTGKQIGKPLTGHHSKWITWLCWEPL

yeast      LVKPGSKPRLASSSKDGTIKIWDTVSRVCQYTMSGHTNSVSCVWGGQGLLYSGSHDRTV
c.elegans  -----TVKMWR-----ADDGVMCRNMTG-----
fly        HRDPECR-KLASASGDGDCRIWDVKGQCLMNIAGHTNAVTAVRWGGAGLIYTSSKDRTV
mouse      -----
human      -----
frog       HLNPESTRY-LASASKDCTIRIWDTVMGQCQKILTSTQSVTAVKWGGDGLLYSSSQDRTI

yeast      RVWDINSQGRGINILKSHAHWNHLSLSTDYALRIGAFDHTGKK-----PSTPEEAQKKA
c.elegans  -----HAHWINTLALNTDYALRTSCFE-----PSK-----
fly        KMWR-AADGILCRTFSGHAHWNNIALSTDYVLRGTGPFHPVKDRSKSHLSLSTEELQESA
mouse      -----
human      -----
frog       KAWR-AQDGVLCRTLQGHAWVNTMALSTDYVLRKGAFNPADAS--VNPQMSGSLVLEVK

yeast      LENYEKICKKNGNSEEMMVTASDDYTMFLWNPLKSTKPIARMTGHQKLVNHFVAFSPDGRY
c.elegans  -----INRMTGHMQLVNVVVFSPDTRY
fly        LKRYQAVCP--DEVESLVSCSDNTLYLWRN-NQNKCVERTGHQNVVNDVKYSPDVKL
mouse      -----
human      -----
frog       EKALKRSNEVRGQGPRLVSGSEDFTLFLWAPAEKKPLQRMTHQALINEVLFSPDTRI

yeast      IVSASFNSIKLWDGRDGKFISTRGHIAVYQVAWSSDCRLLVSCSKDITLKVWDVTRR
c.elegans  IASASFDSVKLWCGRTGKYLASFRGHVGPVYQVAWSADSRLLVSGSADSTLKVFEKTK
fly        IASASFDSVRLWRASDGQYMATFRGHVQAVYTVAWSADSRLIVSGSKDSTLKVWSVQTK
mouse      -----
human      -----
frog       IASASFDSIKLWDGKTGKFLTSLRGHVSAVYQIAWSADSRLLVSGSSDSTLKVWDSKTK

yeast      KLSVDLPGIKTKLY-VDWSVDGKRVCSSGKDKMVRLWTH
c.elegans  SLYYDLPGHGEVFTVDWSPEGTKVVSAGKDKVLKLW--
fly        KLAQELPGHADEVFGVDWAPDGSRVASGKDKVIKLWAY
mouse      -----
human      -----
frog       KLLIDLPGHADEVYSVDWSPDGQRVASGKDKCLRIWRK

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204410-0560660

Sequence I.D. No.1: Drosophila Notchless protein

MQETDTEQEATPHTIQARLVYTGEEAGPPIDLPA GITTQQLGLICNALLKNEEA
TPYLFVGEDEIKKSLEDTLDLASVD TENVIDIVYQPQAVFKVRPVTRCTSSMP
5 GHAEAVVSLNFSPDGAHLASGSGD TTVRLWDLNTETPHFTCTG HKQWVLCV
SWAPDGKRLASGCKAGSIIWDPETGQQKGRPLSGHKKHINCLAWEPYHRDP
ECRKLASASGDGDCRIWDVKLGQCLMNIAGHTNAVTA VRWGGAGLIYTSSK
DRTVKMWRAADGILCRTFSGHAHWVNNIALSTDYVLR TGPFHPVKDRSKSH
LSLSTEELQESALKRYQAVCPDEVESLVSCSDDNTLYL WRNNQNKCVERT
10 GHQNVVNDVKYSPDVKLIASASFDKSVRLWRASDGQYMATFRGHVQAVYT
VAWSADSR LIVSGSKDSTLKVWSVQTKKLAQELPGHADEVFGVDWAPDGSR
VASGGKDKVIKLWAY

Sequence I.D. No. 2: Drosophila *Nle* cDNA

15 aattcccaaaaaATGCAGGAGACGGACACGGAGCAAGAGGCCACGCCACATACG
ATACAGGCGCGCCTCGTTTACACGGGCGAGGAAGCCGGCCCGCCAATCGA
CCTGCCGGCAGGAATCACTACCCAGCAATTGGGACTGATTTGCAACGCGC
TGCTGAAAAACGAGGAAGCCACTCCATATTTGTTTTTCGTGGGCGAGGAT
20 GAGATCAAGAAGAGCCTGGAGGACACGTTGGACTTGGCGTCAGTGGACA
CCGAAAACGTGATCGATATTGTGTATCAGCCACAGGCGGTTTTCAAAGTG
CGCCCAGTGACAAGATGCACGAGTTCCATGCCGGGACACGCCGAGGCTGT
GGTTTCGCTGAATTTACGCCCCGATGGTGCTCATCTCGCCAGTGGAAGTG
GCGACACCACAGTGCGATTGTGGGATCTTAACACAGAGACACCGCACTTC
25 ACCTGCACAGGTCATAAGCAGTGGGTTCTGTGCGTATCCTGGGCTCCGGA
TGGCAAACGGTTGGCCAGCGGTTGCAAAGCGGGCTCTATAATCATCTGGG
ACCCGGAGACGGGTCAGCAGAAGGGGCGACCCTTGAGTGGGCACAAGAA
ACACATCAACTGCCTCGCCTGGGAACCGTATCATCGCGATCCGGAGTGCA
GGAAACTTGCTTCCGCCAGTGGAGACGGGGACTGCCGGATTTGGGACGTA
30 AAATTGGGCCAGTGCCTTATGAACATTGCCGGACACACAAATGCTGTGAC
AGCAGTGAGATGGGGTGGAGCGGGCCTTATTTATACATCCTCCAAAGATC
GCACAGTGAAGATGTGGCGAGCAGCTGATGGAATCTTGTGCCGGACGTTT
TCTGGCCAAGCTCACTGGGTAAACAACATTGCGCTGAGCACCGATTACGT
CCTGCGCACTGGTCCATCCATCCGGTGAAGGATCGCTCCAAGAGCCACC

TCAGTTTGAGCACTGAGGAATTGCAGGAATCTGCCTTGAAGCGCTACCAG
GCCGTGTGCCCTGACGAGGTGGAGTCGCTGGTTTCCTGTTCCGGATGACAA
CACCTCTATCTGTGGCGGAACAACCAGAACAAGTGC GTTGAGCGCATGA
CAGGGCACCAGAACGTGGTCAACGATGTGAAATATTCGCCGGATGTAAAG
5 CTAATTGCGTCTGCTTCATTGACAAGTCAGTGCGTCTGTGGCGAGCCAGC
GATGGTCAGTACATGGCCACCTTCCGGGGTCATGTGCAGGCTGTTTACAC
GGTTGCCTGGTCCGCGGACTCCCGCTTGATTGTTTCCGGCAGCAAAGACTC
AACTCTAAAAGTATGGAGTGTGCAGACGAAGAACTGGCACAGGAGCTG
CCTGGACATGCGGATGAGGTGTTCCGAGTGGACTGGGCGCCCGATGGCTC
10 TAGAGTTGCCTCTGGTGGCAAGGACAAAGTTATAAAGCTATGGGCTTATT
AAcaatcattaactgtacacggtagaaataacttaggaataaagtaaacgtcctgagtaaaaaaaaaaaaaaaaaa
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